COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES & ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRNOMENTAL PROTECTION
DIVISION OF WATER

APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM AND / OR WATER QUALITY CERTIFICATION

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. *If the project involves work in a stream, such as bank stabilization, dredging or relocation, you will also need to obtain a 401 Water Quality Certification (WQC) from the Division of Water.* This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, you will also need to complete the attached Notice of Intent for Storm Water Discharges, and return both forms to the Floodplain management Section of the KDOW. This general permit will require you to create and implement an erosion control plan for the project.

190188

1. OWNER: Salt River Development Company, LLC
c/o Mr. Jim Rice
Give name of person(s), company, governmental unit, or other owner of proposed project.

MAILING ADDRESS: 1213 Outer Loop
Louisville, KY 40219

TELEPHONE #: (502) 364-9100 EMAIL: main@flynnbrothers.com

2. AGENT: Redwing Ecological Services, Inc.
c/o Mr. Brad Anderson
Give name of person(s) submitting application, if other than owner.

ADDRESS: 1139 S. 4th Street , Louisville, KY 40203

TELEPHONE #: (502) 625-3009 EMAIL: banderson@redwing.win.net

3. ENGINEER: Mr. Steve Scott, Mindel Scott and Associates, Inc. P.E. NUMBER: 16225
Contact Division of Water if waiver can be granted.
TELEPHONE #: (502) 485-1508 EMAIL: sscott@mindelscott.com

4. DESCRIPTION OF CONSTRUCTION: The proposed Weller Farm Expansion project involves the development of a light industrial/warehouse facility with associated roads, parking, and infrastructure, as well as select modifications to building size requirements and associated roads, parking and infrastructure on two light industrial/warehouse facilities that were authorized by the USACE under a NWP 39 (USACE ID No. LRL-2008-683) on August 25, 2008.
Describe the type and purpose of construction and describe stream impact

5. COUNTY: Bullitt NEAREST COMMUNITY: Shepherdsville

6. USGS QUAD NAME: Shepherdsville
LATITUDE/LONGITUDE: N 37.972° W 85.668°

7. STREAM NAME: Unnamed tributaries to Buffalo Run WATERSHED SIZE (in acres): Approx. 270

8. LINEAR FEET OF STREAM IMPACTED: 915 feet (0.126 acre) of intermittent stream, 510 feet (0.024 acre) of ephemeral stream, and 0.94 acre of wetland.

9. DIRECTIONS TO SITE: Take I-65 South to Kentucky Highway 480 (Exit 116). Turn left onto Kentucky Highway 480 (east). Go approximately 1.8 miles east on Kentucky Highway 480 and site will be on right (on south side of highway).

10. IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE? ☐ Yes ☒ No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE:

11. ESTIMATED BEGIN CONSTRUCTION DATE: March 2009

12. ESTIMATED END CONSTRUCTION DATE: March 2011

13. HAS A PERMIT BEEN RECEIVED FROM THE US ARMY, CORPS of ENGINEERS? ☐ Yes ☒ No If yes, attach a copy of that permit.

14. THE APPLICANT *MUST* ADDRESS PUBLIC NOTICE:

(a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS:

____ Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit)

____ Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)

(b) _X_ I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:

This project will be subject to 30 days of public notice through the Public Notice requirements of the Section 404 permit process, as administered by the U.S. Army Corps of Engineers. Also, this application is only for Water Quality Certification, and coordination with the Floodplain Management Section will be submitted once detailed design drawings are complete.

Contact Division of Water for requirements.

15. I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:

Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.

16. LIST OF ATTACHMENTS: Joint 404 Individual Permit / 401 Water Quality Certification Application Package

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. I, John (owner) CERTIFY THAT THE OWNER OWNS OR HAS EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).

18. REMARKS: _____

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: Jerma H. Rice

Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: 11/5/08

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR:

Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section
Division of Water
14 Reilly Road
Frankfort, KY 40601

APPENDIX B

LIST OF ADJOINING PROPERTY OWNERS

List of Adjoining Property Owners

Raymond, Kevin, & Gary McGruder
896 Bates Lane
Shepherdsville, KY 40165

Cedar Grove Crossdock LLC
4139 Cadillac Ct. Suite 200
Louisville, KY 40213

Joseph D. & Donna R. Spahl
1250 Peaceful Way
Shepherdsville, KY 40165

Robert R. & Charlene V. Cottier
1330 Peaceful Way
Shepherdsville, KY 40165

JAHA-COX PROPERTIES, LLC
8011 New LaGrange Rd. Suite 3
Louisville, KY 40222

Mark A & Sheila Y. Martin
2794 Cedar Grove Rd.
Shepherdsville, KY 40165

Valley View Farm Limited Partnership
1040 Valley View Dr.
Shepherdsville, KY 40165

Anthony L. Thomas
2607 Cedar Grove Rd.
Shepherdsville, KY 40165

Chas. L. & Mary T. Hamilton & Miller;
Hamilton; McDade Trust
1788 Cedar Grove Rd.
Shepherdsville, KY 40165

Virginia Lee Orr
5659 Mouse Creek Rd. NW
Cleveland, TN 37312

Isbell Zalea Gay Duval
25500 E. County Rd.
N 2560 Manito IL 61546

City of Shepherdsville c/o Institutional Distrib.
Inc.
342 Gordon Industrial Dr.
Shepherdsville, KY 40165

City of Shepherdsville
P.O. Box 400
Shepherdsville, KY 40165

APPENDIX C

RAPID BIOASSESSMENT PROTOCOL FORMS

High Gradient Stream Data Sheet

STREAM NAME: Intermittent Stream 1 - upstream	LOCATION: Weller Farm Development
STATION #: RBP 1 MILE:	BASIN/WATERSHED: Salt River/Buffalo Run
LAT: LONG:	COUNTY: Bullitt USGS 7.5 TOPO: Shepherdsville, Kentucky
DATE: 7/25/07 TIME: 11:00 [X] AM [ ] PM	INVESTIGATORS: B. Anderson and B. Deetsch
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	Intermittent Showers
[Clear/Sunny]	[Clear/Sunny]

Has there been a heavy rain in the last 7 days? [Yes] No

Air Temperature 83 °F 28 °C

Rainfall in the past 24 hours 0 in.

90 % Cloud Cover

P-Chem: Temp (°C) _____ D.O. (mg/l) _____ % Saturation _____ pH (S.U.) _____ Cond. _____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	2 - 8 ft
Range of Depth	dry, 1 - 3 ft banks
Average Velocity	dry ft/s
Discharge	dry cfs
Est. Reach Length	~ 300 ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	Construction	X Forest
Deep Mining	Commercial	X Pasture/Grazing
Oil Wells	X Industrial	Silviculture
Land Disposal	X Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
Other

Stream Flow:

[Dry] Pooled Low Normal
High Very Rapid or Torrential

Stream Type:

Perennial [Intermittent]
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

American elm
Sugar maple

Canopy Cover:

Fully Exposed (0-25%)
Partially Exposed (25-50%)
Partially Shaded (50-75%)
[Fully Shaded (75-100%)]

Channel Alterations:

Dredging
Channelization
(Full Partial)

Substrate Est. P.C	Riffle 20 %	Run 65 %	Pool 15 %
Silt/Clay (<0.06 mm)	X	X	X
Sand (0.06 - 2 mm)			
Gravel (2-64 mm)	X		
Cobble (64 - 256 mm)	X	X	
Boulders (>256 mm)	X		
Bedrock	X		X

Habitat Parameter	Condition Category			
	Excellent	Good	Fair	Poor
1. Epifaunal Substrate/ Available Cover 11	Greater than 70% of substrate favorable for epifaunal colonization and fish cover. 16 - 20	40-70% mix of stable habitat: well-suited for full coloinization potential. 11 - 15	20-40% mix of stable habitat; habitat availability less than desirable. 6 - 10	Less than 20% stable habitat; lack of habitat is obvious. 0 - 5
2. Embeddedness 11	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. 16 - 20	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment. 11 - 15	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment. 6 - 10	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment. 0 - 5
3. Velocity/Depth Regime 8	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m). 16 - 20	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes). 11 - 15	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low). 6 - 10	Dominated by 1 velocity/depth regime (usually slow-deep). 0 - 5

Project Name: Weller Farm Development

Stream Name: Intermittent Stream 1

4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
10				
	16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
3				
	16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
18				
	16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
16				
	16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability	Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB) 7	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 7	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection	More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB) 9	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width	Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB) 9	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: 127 **NOTES/COMMENTS:** Poor

Interior Plateau Eco Region (High Gradient Assessments) Headwater Streams (<6.0 mi2)

Fully Supporting	(Excellent)	155-200
Supporting but Threatened and Partially Supporting	(Average)	138-154
Not Supporting	(Poor)	0-137

Reference: Kentucky Division of Water. 2002. "Methods for Assessing Biological Integrity of Surface Waters in Kentucky."

High Gradient Stream Data Sheet

STREAM NAME: Intermittent Stream 1 - downstream	LOCATION: Weller Farm Development
STATION #: RBP 5 MILE:	BASIN/WATERSHED: Salt River/Buffalo Run
LAT: N37 58.563' LONG: W85 41.087'	COUNTY: Bullitt USGS 7.5 TOPO: Shepherdsville, Kentucky
DATE: 5/14/2007 TIME: 1:05 [ ] AM [X] PM	INVESTIGATORS: B. Anderson and N. Guthals
TYPE SAMPLE: P-CHEM Macroinvertebrate FISH BACT.	

WEATHER:

Now	Past 24 Hours
Heavy Rain	Heavy Rain
Steady Rain	Steady Rain
Intermittent Showers	Intermittent Showers
[Clear/Sunny]	[Clear/Sunny]

Has there been a heavy rain in the last 7 days? ____ Yes [No]

Air Temperature 85 °F 29 °C

Rainfall in the past 24 hours 0 in.

0 % Cloud Cover

P-Chem: Temp (°C) _____ D.O. (mg/l) _____ % Saturation _____ pH (S.U.) _____ Cond. _____ Grab

INSTREAM WATERSHED FEATURES:

Stream Width	8 - 12 ft
Range of Depth	2-4 in, 2-4 ft banks
Average Velocity	<1 ft/s
Discharge	_____ cfs
Est. Reach Length	~ 200 ft

LOCAL WATERSHED FEATURES:

Predominant Surrounding Land Use:

Surface Mining	Construction	X Forest
Deep Mining	Commercial	X Pasture/Grazing
Oil Wells	X Industrial	Silviculture
Land Disposal	X Row Crops	Urban Runoff/Storm Sewers

Hydraulic Structures

Dams Bridge Abutments
Island Waterfalls
Other

Stream Flow:

Dry Pooled Low [Normal]
High Very Rapid or Torrential

Stream Type:

Perennial [Intermittent]
Ephemeral Seep

Riparian Vegetation

Dominate Type:

[Trees] [Shrubs]
[Grasses] [Herbaceous]

Number of strata: 4

Dom. Tree/Shrub Taxa

Sycamore
Sugar maple
Spicebush
Coralberry

Canopy Cover:

Fully Exposed (0-25%)
Partially Exposed (25-50%)
Partially Shaded (50-75%)
[Fully Shaded (75-100%)]

Channel Alterations:

Dredging
Channelization
(Full Partial)

Substrate Est. P.C	Riffle ____ %	Run 100 %	Pool ____ %
Silt/Clay (<0.06 mm)		X	
Sand (0.06 - 2 mm)		X	
Gravel (2-64 mm)		X	
Cobble (64 - 256 mm)			
Boulders (>256 mm)			
Bedrock			

Habitat Parameter	Condition Category: Excellent	Good	Fair	Poor
1. Epifaunal Substrate/ Available Cover 6	Greater than 70% of substrate favorable for epifaunal colonization and fish cover. 16 - 20	40-70% mix of stable habitat: well-suited for full coloinization potential. 11 - 15	20-40% mix of stable habitat; habitat availability less than desirable. 6 - 10	Less than 20% stable habitat; lack of habitat is obvious. 0 - 5
2. Embeddedness 3	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. 16 - 20	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment. 11 - 15	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment. 6 - 10	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment. 0 - 5
3. Velocity/Depth Regime 8	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is <0.3 m/x, deep is >0.5 m). 16 - 20	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes). 11 - 15	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low). 6 - 10	Dominated by 1 velocity/depth regime (usually slow-deep). 0 - 5

Project Name: Weller Farm Development

Stream Name: Intermittent Stream 1 - downstream

4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of bottom affected by deposition.	Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 20-50% of the bottom affected	Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 50-80% of the bottom affected. Sediment deposits at obstructions, constrictions, and bends.	Heavy deposits of fine material, increased bar development; more than 80% of bottom changing frequently.
8	16 - 20	11 - 15	6 - 10	0 - 5
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel is exposed.	Water fills 25-50% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
10	16 - 20	11 - 15	6 - 10	0 - 5
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, evidence of past channelization (> past 20 years) may be present.	Channelization may be extensive; shoring structures on both banks and 40-80% stream reach channelized.	Brush shored with gabion or cement; over 80% of reach channelized and disrupted.
13	16 - 20	11 - 15	6 - 10	0 - 5
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of ditance between riffles divided by width of the stream <7:1.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; ditance between riffles divided by the width of the stream is a ratio of >25.
5	16 - 20	11 - 15	6 - 10	0 - 5
8. Bank Stability	Stable; evidence of erosion of bank failure absent or minimal. Little potential for future problem.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank has areas of erosion.	Moderately unstable; 30-60% of bank has areas of erosion; high erosion potential during floods.	Unstable; eroded areas frequent; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE (LB) 8	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 8	9 - 10	6 - 8	3 - 5	0 - 2
9. Vegetative Protection	More than 90% of streambank surfaces and immediate riparian zone covered by native vegetation.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants not well-represented; disruption evident.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil.	Less than 50% of the streambank surfaces covered by vegettaion disruption of streambank vegetation is very high.
SCORE (LB) 9	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 9	9 - 10	6 - 8	3 - 5	0 - 2
10. Riparian Vegetative Zone Width	Width of riparian zone >18 meters; human activities have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.
SCORE (LB) 10	9 - 10	6 - 8	3 - 5	0 - 2
SCORE (RB) 10	9 - 10	6 - 8	3 - 5	0 - 2

Total Score: **107** **NOTES/COMMENTS:** Poor

Interior Plateau Eco Region (High Gradient Assessments) Headwater Streams (<6.0 mi2)

Fully Supporting	(Excellent)	155-200
Supporting but Threatened and Partially Supporting	(Average)	138-154
Not Supporting	(Poor)	0-137

Reference: Kentucky Division of Water. 2002. "Methods for Assessing Biological Integrity of Surface Waters in Kentucky."

APPENDIX D

SHPO CLEARANCE LETTER

COMMERCE CABINET
KENTUCKY HERITAGE COUNCIL

Steven L. Beshear
Governor

The State Historic Preservation Office
300 Washington Street
Frankfort, Kentucky 40601
Phone (502) 564-7005
Fax (502) 564-5820
www.kentucky.gov

Marcheta Sparrow
Secretary

Donna M. Neary
Executive Director and
State Historic Preservation Officer

August 5, 2008

Mr. Brad Anderson
Redwing Ecological Services, Inc.
1139 South Fourth Street
Louisville, Kentucky 40203

Re: ***A Cultural Resource Survey of the Proposed Weller Farm Industrial Development Area Near the Community of Shepherdsville in Bullitt County, Kentucky.*** By George C. Arnold

Dear Mr. Anderson:

The State Historic Preservation Office has reviewed the above referenced archaeological report. The survey resulted in the discovery of four previously undocumented archaeological sites (15Bu682, 15Bu683, 15Bu684, and 15Bu685), six prehistoric isolated finds, and seven modern structures. The seven structures are all less than 50 years old, and thus are not eligible for listing in the National Register of Historic Places. The six isolated finds consisted of two biface fragments and four pieces of lithic debitage that were widely separated spatially and could not be determined to be affiliated with each other or with any of the documented sites. These isolated finds were determined by the author to likewise to be not eligible for listing in the National Register of Historic Places.

Site 15Bu682 was identified as a low density lithic scatter, which consisted of several pieces of chipped stone debris, one biface fragment, a piece of fire-cracked rock, and a piece of unmodified shale. Sites 15Bu683 and 15Bu684 were also identified as low density lithic scatters, though the artifacts were limited only to flakes of chipped stone debris. Site 15Bu685 was identified as another low density lithic scatter, with artifacts consisting of chipped stone debris and one piece of fire cracked rock. All of these sites are classified as open habitations without mounds of unassigned prehistoric cultural affiliation. The artifacts at all of these sites were recovered from plowzone contexts, and no spatial patterning of artifact distribution was discernable at any location. No intact deposits or features were identified at any of these sites. Nor were any diagnostic artifacts recovered from any of these sites.

Because of the disturbed contexts, low artifact density, absence of intact features, and the research potential for Sites 15Bu682, 15Bu684, 15Bu683, and 15Bu685 is low, the author concluded that they are not eligible for listing in the National Register of Historic Places. As such, he recommended that no additional work be conducted at these sites. I concur with the author's findings and recommendations. However, there were several issues with the report that should be rectified for future projects.

First, there was a lack of consistency in the reported investigation methods and the work that was actually completed. For example, the methods description indicates that "all observed artifacts were

flagged and their locations piece plotted on a site-plan map... The locations of all artifacts were also recorded using the hand-held GPS unit" (Arnold 2008:29). However, based on the site maps and conversation with the report's author, individual artifacts were not piece plotted; rather, they were collected in blocks within each of the plow strip rows or in shovel probes.

Second, the *Previous Research and Cultural Overview* section fails to include a discussion of all sites that are located within a 2-km radius of the project area. In particular, Sites 15Bu597, 15Bu598, and 15Bu599 are not mentioned. I would further strongly recommend that the Paleoindian Period section be updated as it is significantly outdated.

Should you have any questions, feel free to contact Kary Stackelbeck of my staff at (502) 564-7005, extension 147.

Sincerely,

Mark Dennen,
Acting Executive Director
and State Historic Preservation Officer

cc: George Crothers
Charles M. Niquette

MD:kls

REDWING ECOLOGICAL SERVICES, INC. 1139 South Fourth Street • Louisville, KY 40203 • Phone 502.625.3009 • Fax 502.625.3077

November 5, 2008

Ms. Lee Anne Devine
Chief, South Section – Regulatory Branch
U.S. Army Corps of Engineers – Louisville District
600 Dr. Martin Luther King Jr. Place
Louisville, Kentucky 40202

Mr. Alan Grant
Supervisor, WQC Section
Kentucky Division of Water
200 Fair Oaks
Frankfort, Kentucky 40601

Subject: **Application for Section 404 Individual Permit and Section 401 Water Quality Certification**
Weller Farm Expansion
Bullitt County, Kentucky
Redwing Project 08-033

Dear Ms. Devine and Mr. Grant:

Redwing Ecological Services, Inc. (Redwing), on behalf of the Salt River Development Company, LLC (SRDC), is pleased to submit this joint Application for a Section 404 Individual Permit (IP) and Section 401 Water Quality Certification (WQC) for the proposed expansion to the Weller Farm development located in Bullitt County, Kentucky.

A Nationwide Permit (NWP) 39 was authorized by the U.S. Army Corps of Engineers (USACE) on August 25, 2008 (USACE ID No. LRL-2008-683) for the construction of two light industrial/warehouse facilities and associated roads, parking, and infrastructure on the Weller Farm site. Construction is underway. SRDC now has the need to construct an additional light industrial/warehouse facility to the east of the permitted northwestern building.

The proposed expansion of the Weller Farm development will result in unavoidable permanent impacts to 1.09 acres of jurisdictional waters of the U.S., including 915 feet (0.126 acre) of intermittent stream, 510 feet (0.024 acre) of ephemeral stream, and 0.94 acre of wetland. Compensation for the proposed water/wetland impacts will be provided through payment to an in-lieu fee fund for intermittent stream impacts and the purchase of mitigation bank credits for wetland impacts.

This application presents required project information, including project purpose and need, project alternatives, project impacts, and proposed compensatory mitigation, to assist your review.

We appreciate the opportunity to work with you on this project. Please contact Brad Anderson or Ron Thomas at (502) 625-3009 with any questions you have during your review.

Sincerely,

Bradley M. Anderson, P.E.
Project Engineer II

by MC

Ronald L. Thomas
Principal
Senior Ecologist

File: 08-033/Reports/IP-Report-Weller Farm

cc: Jim Rice – Salt River Development Company, LLC
Justin Ray – Mindel Scott and Associates, Inc.

APPLICATION FOR SECTION 404 INDIVIDUAL PERMIT AND SECTION 401 WATER QUALITY CERTIFICATION

WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT

and

KENTUCKY DIVISION OF WATER

November 2008

APPLICATION FOR SECTION 404 INDIVIDUAL PERMIT AND SECTION 401 WATER QUALITY CERTIFICATION

WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

Submitted to:

U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT

and

KENTUCKY DIVISION OF WATER

Submitted by:

SALT RIVER DEVELOPMENT COMPANY, LLC
Louisville, Kentucky

Prepared by:

Redwing Ecological Services, Inc.
Louisville, Kentucky

Bradley M. Anderson by JMC

Bradley M. Anderson, P.E.
Project Engineer II

Ronald L. Thomas
Principal
Senior Ecologist

November 5, 2008

EXECUTIVE SUMMARY

This joint application for a Section 404 Individual Permit and Section 401 Water Quality Certification has been prepared on behalf of Salt River Development Company, LLC (SRDC), for the expansion of the Weller Farm development located in Bullitt County, Kentucky. The project purpose is the expansion of light industrial and warehousing facilities on the 160-acre property. The proposed project represents the least environmentally damaging practicable alternative for meeting this need based on an assessment of alternative sites and alternative designs.

A Nationwide Permit (NWP) 39 was authorized by the U.S. Army Corps of Engineers (USACE) on August 25, 2008 (USACE ID No. LRL-2008-683) for the construction of two light industrial/warehouse facilities and the associated roads, parking, and infrastructure on the Weller Farm site. Construction of these facilities is underway with initial grading and infrastructure construction activities. SRDC now has the need to construct an additional light industrial/warehouse facility to the east of the permitted northwestern facility. Also, completion of detailed design and grading plans for the previously permitted buildings will require additional stream impact.

The proposed Weller Farm Expansion will result in unavoidable impacts to 1.09 acres of jurisdictional waters of the U.S., including: 0.94 acre of wetland; 915 linear feet (0.126 acre) of intermittent stream; and 510 linear feet (0.024 acre) of ephemeral stream.

Impacts to jurisdictional waters/wetlands have been minimized and avoided to as great an extent as possible. Compensation for impacts to jurisdictional waters associated with the Weller Farm Expansion includes: payment of $109,800 to the Kentucky Department of Fish and Wildlife Resources (KDFWR) Stream Fund in-lieu of formal stream mitigation and purchase of 1.9 acres of credit from and approved wetland mitigation bank.

Potential habitat for the federally endangered Indiana bat (*Myotis sodalis*) was identified on the project site. However, potential habitat trees that were located within the proposed development area were marked by Redwing wildlife biologists and cut down in the spring of 2008, prior to March 31st. Thus, the proposed Weller Farm Expansion is not likely to have any adverse impact on the Indiana bat or any other federally-listed threatened or endangered species.

The site contains one house and four barns and consists primarily of pasture/open fields and forest. A Phase 1 cultural resources survey of the site was conducted by Cultural Resource Analysts, Inc. (CRA). The results of the survey are that no significant cultural resources are present on the site. A letter dated August 5, 2008 was received from the State Historic Preservation Office (SHPO) stating that SHPO concurs with CRA's conclusion that no features on the project site are eligible for listing in the National Register of Historic Places and that no additional work is recommended on the project site.

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1.0 INTRODUCTION

Salt River Development Company, LLC (SRDC), is pleased to submit this joint application for a federal Individual Permit and state Water Quality Certification under Sections 404 and 401 of the Clean Water Act, respectively, for water/wetland impacts associated with the proposed Weller Farm Expansion project in Bullitt County, Kentucky (Figure 1). The main objectives of this report are to:

- describe the proposed project in terms of project purpose, project background, site history, and proposed development plans
- present a needs assessment for the proposed project
- present an analysis of alternative site locations and alternative site designs
- describe potential project impacts
- present the proposed compensatory mitigation for unavoidable waters/wetland impacts associated with the project

A completed Application for Department of the Army Permit and Application for Water Quality Certification are provided in Appendix A. A list of adjoining property owners is provided in Appendix B.

2.0 PROJECT DESCRIPTION

SRDC proposes the expansion of the Weller Farm development on an approximately 160-acre site in Bullitt County, Kentucky (Figure 1). The site is located on the south side of Kentucky Highway 480, approximately 1.8 miles east of the intersection of Kentucky Highway 480 and Interstate 65. It is bound by Kentucky Highway 480 and predominantly open field to the north; open field, forest, pasture, and residential development to the east; forest to the south; and forest and industrial development to the west (Figure 2).

A delineation and survey of on-site waters/wetlands has been completed by Redwing, and the boundaries of these water/wetland features and their jurisdictional status have been verified by the U.S. Army Corps of Engineers (USACE). A Nationwide Permit (NWP) 39 (LRL-2008-683) was authorized by the USACE on August 25, 2008 for impacts associated with the construction of two light industrial/warehouse facilities and associated roads, parking and infrastructure on the Weller Farm development site. As part of the NWP 39, an Approved Jurisdictional Determination was issued for all of the features identified as isolated on the Water/Wetland Location Map (Figure 3) and a preliminary jurisdictional determination was signed by both the developer's agent and the USACE for all of the features identified as jurisdictional. A summary of the delineated waters and wetlands located on the Weller Farm development site is provided in Section 3.1 of this document. Construction of this project is underway, with the initiation of clearing/grading and infrastructure construction.

Based on client building requirements, SRDC now has the need to expand the existing Weller Farm development by constructing an additional light industrial/warehouse facility to the east of the permitted northwestern facility. SRDC is also requesting expansion of the permitted parking and road alignments to allow construction without retaining walls. This will entail additional impacts to Intermittent Stream 2, as shown in Figure 4. The proposed Weller Farm Expansion project will result in unavoidable impacts to on-site wetlands and streams to allow for the construction of an additional light industrial/warehouse facility and the minor expansions of parking and roadways along the central stream. As shown on Figure 4, the Weller Farm Expansion project will result in impacts to a total of 1.09 acre of jurisdictional water, including: 915 feet (0.126 acre) of intermittent stream; 510 feet (0.024 acre) of ephemeral stream; and 0.94 acre of wetland.

2.1 PROJECT PURPOSE

The purpose of the Weller Farm Expansion is to help meet the growing warehousing needs along the I-65 corridor to serve industries distributing merchandise via United Parcel Service (UPS), which is located at the Louisville International Airport in Jefferson County, Kentucky, through expansion of the currently approved

portion of the Weller Farm development site. To feasibly meet these current warehousing distribution needs, the proposed expansion facility must be approximately 400,000 square feet in size, and be located adjacent to the existing Weller Farm buildings.

2.2 PROJECT NEED

In 1981, United Parcel Service (UPS) began an overnight-delivery hub at the Louisville International Airport. In 2005, UPS chose Louisville for its heavy aircraft hub and announced a significant expansion of its Louisville operation in 2006. The expansion of UPS, especially over the past seven years, has driven demand for warehousing and distribution facilities for companies that provide deliveries to customers through UPS. The increase in demand for large, industrial grade, warehousing facilities is illustrated by development at all major access points to Interstate 65 in the vicinity of the airport and south. The market has absorbed the available warehousing/distribution facilities, and very few new facilities are currently under construction. As an example, the Cedar Grove Business Park located immediately west of this site on KY 480 has been built out and the warehouse developer ProLogis has identified clients for the two facilities previously permitted in Weller Farm. Therefore, there is a need for industrial grade warehousing and distribution facilities to support the increasing demand in the local economy.

2.3 PROJECT ALTERNATIVES

As required by Section 404(b)(1) guidelines, an alternatives analysis of the proposed commercial/industrial development expansion project has been conducted. Under this analysis, the proposed Weller Farm Expansion has been identified as the least environmentally damaging practicable alternative for meeting identified project needs. An evaluation of both alternative site locations and design alternatives is presented below.

2.3.1 Alternative Site Locations

The purpose of the project is to expand the existing Weller Farm development site with additional warehousing and distribution infrastructure for clients utilizing the UPS distribution hub in Jefferson County, Kentucky. Expansion alternatives include adding warehouse facilities to the north, south, east, or west.

North: Expansion to the north would require encroachment on a portion of the Gordon Food facility, which is not feasible. The other open land to the north is not owned by SRDC and is not available.

South: While the SRDC owns the land narrowly located immediately to the south, the development potential of the site is extremely limited. These limitations include the very steep terrain that would complicate the ability to create a sufficiently-sized flat building pad. In addition, the SRDC does not own land to the southwest and southeast, which significantly limits the expanded building's size. It would also entail potential impacts to jurisdictional streams.

West: Expansion to the west is not feasible as it would require use of land not owned by SRDC, which is currently not available. It would also entail potential impacts to jurisdictional streams and wetlands

East: Expansion to the east represents the only feasible alternative site for adding to the existing facilities. It is land already owned and controlled by SRDC, utilizes the existing access road from KY 480, and allows the positioning of a new building to allow for enlarging the currently permitted northeast building into one large warehouse facility, should future needs require.

2.3.2 Design Alternatives

Three design alternatives were evaluated for the expansion of the Weller Farm development to the east. The potential for eliminating impacts to on-site waters/wetlands is severely restricted by the scattered location of streams and wetlands throughout the property. Each of the design alternatives is discussed below.

No Impact Alternative: This alternative completely avoids impacts to all jurisdictional waters on site. However, because of the location of the streams and wetlands, only the extreme northeastern portion of the property would be developable. Only a considerably smaller warehouse facility could be built on this limited area, less than half the size of the proposed facility. This design alternative is not practicable and is not economically feasible, as the expense to create the small building pad that would have to be constructed to fit in this area and the installation of the required infrastructure could not be recouped through the construction of such a small building.

Full Impact Alternative: This alternative would result in permanent impacts to the majority of wetlands and streams on site. Total impacts could approach 2,380 feet of intermittent stream, 1,430 feet of ephemeral stream, and 0.9 acre of wetlands. This alternative is more desirable from a development standpoint, since it allows more flexibility with site design, particularly expansion across the stream between the two currently proposed buildings. However, this alternative provides no minimization and avoidance of impacts to jurisdictional waters, and the extensive stream mitigation requirements make this alternative less economically feasible.

Selected Alternative: This alternative was determined to be the least environmentally damaging practicable development alternative for the proposed project. It will result in sufficient building size to allow economic development of the appropriate infrastructure, and to meet minimum expansion size requirements. This alternative provides minimization of impacts to jurisdictional waters and other natural communities on the site through avoidance of impacts to large portions of the central intermittent stream and its associated riparian corridor.

3.0 EXISTING SITE CONDITIONS

Currently, the site consists primarily of open field/pasture habitat with small areas of wooded habitat in the southernmost portion of the site (Figure 2).

3.1 WATERS/WETLANDS

A delineation of on-site waters and wetlands was conducted during site visits on July 25 through 27, 2007 and April 21, 2008. Jurisdictional waters and wetlands within the entire 160-acre Weller Farm site are depicted on Figure 3 and summarized in the table below.

Feature	Length (ft)	Area (ac)	Status
Intermittent Stream 1	2,080	0.29	Jurisdictional
Intermittent Stream 2	550	0.03	Isolated
Intermittent Stream 3	230	0.03	Jurisdictional
Intermittent Stream 4	70	0.003	Jurisdictional
TOTAL INTERMITTENT*	**2,380**	**0.32**	
Ephemeral Stream 1	480	0.02	Jurisdictional
Ephemeral Stream 2	145	0.002	Isolated
Ephemeral Stream 3	280	0.006	Jurisdictional
Ephemeral Stream 4	230	0.01	Jurisdictional
Ephemeral Stream 5	20	0.001	Jurisdictional
Ephemeral Stream 6	65	0.001	Isolated
Ephemeral Stream 7	420	0.02	Jurisdictional
Ephemeral Stream 8	290	0.01	Isolated
Ephemeral Stream 9	450	0.04	Isolated
Ephemeral Stream 10	445	0.03	Isolated
TOTAL EPHEMERAL*	**1,430**	**0.06**	
Wetland 1	---	0.79	Jurisdictional
Wetland 2	---	0.15	Jurisdictional
Wetland 3	---	0.07	Isolated
TOTAL WETLAND*	**---**	**0.94**	
Open Water 1	---	0.30	Isolated
TOTAL OPEN WATER*	**---**	**0.00**	
TOTAL JURISDICTIONAL*	**3,810**	**1.32**	

*Totals include only jurisdictional features

The boundaries of these water/wetland features and their jurisdictional status were field verified by a representative from the U.S. Army Corps of Engineers (USACE) on June 30, 2008. A Nationwide Permit (NWP) 39 (LRL-2008-683) was authorized by the USACE on August 25, 2008 for impacts associated with the construction of two light industrial/warehouse buildings, access roads, and associated infrastructure on the Weller Farm site. As part of the NWP 39, an Approved Jurisdictional Determination was issued for all of the features identified as isolated on the Water/Wetland Location Map, and a preliminary jurisdictional determination was signed by both the developer and the USACE for all of the features identified as jurisdictional (Figure 3).

3.2 FUNCTIONAL ASSESSMENT

Functions and values of on-site wetlands and streams are presented below.

3.2.1 Wetlands

The wetlands on the property were qualitatively assessed for functions and values for four variables: floodflow attenuation; water quality; wildlife habitat; and potential for education or recreational activities. The on-site jurisdictional wetlands range in size from 0.15 acre to 0.79 acre, and are both associated with a former farm pond. One wetland has formed immediately down slope of the pond dam and one has formed in the former pond bottom following breaching of the dam and dewatering of the pond. The functions/values of the wetlands include:

Floodflow Attenuation: Wetland 1 provides limited floodflow attenuation due to its location along a natural drainage channel that transports flows from adjacent properties to the north to Intermittent Stream 1. Wetland 2 provides some floodflow attenuation when Intermittent Stream 1 overbanks. However, due to their small size and highly disturbed nature (particularly Wetland 1), they provided very limited floodflow attenuation.

Water Quality: Wetlands provide water quality benefits by allowing settling of sediment through water retention. Their location along drainage channels and streams allows them to provide this function but the small size of Wetland 2 and the limited vegetation in Wetland 1 restrict its significance in this category.

Wildlife Habitat: Wetland 1 is an emergent wetland and Wetland 2 contains both emergent and scrub/shrub habitat. The ability of these existing wetlands to provide wildlife habitat functions is limited due to their small size, low vegetation diversity, and disturbed nature.

Education/Recreation: The educational/recreational functions of the existing wetlands are very limited due to their small size, low vegetative diversity, and lack of unique characteristics.

3.2.2 Streams

A functional assessment of the on-site jurisdictional intermittent streams was performed using the U.S. Environmental Protection Agency's (USEPA) *Rapid Bioassessment Protocols* (RBP) methodology, as described by Barbour et al. 1999. RBP scores were collected for both upstream and downstream portions of Intermittent Stream 1 (Figure 3). The interior plateau ecoregion high gradient assessment taken from the "Methods for Assessing Biological Integrity of Surface Waters" (Kentucky Division of Water, 2002) was used for evaluating the RBP scores. The following table presents a summary of the RBP scoring. Completed RBP data forms are included in Appendix C.

Stream	Length	RBP Score	Quality
Intermittent Stream 1 – upstream (RBP1)	1,260	127	Poor
Intermittent Stream 1 – downstream (RBP5)	820	107	Poor

Generally, the quality of the on-site ephemeral streams is limited due to their location high in the watershed, the predominant agricultural land use in the watershed, and a history of past disturbance. This results in limited diversity of in-stream habitat, such as deep pools and available substrate, less stable channels, and lower quality riparian habitat.

4.0 POTENTIAL PROJECT IMPACTS

Potential project impacts were evaluated through assessment of the extent and quality of on-site jurisdictional waters/wetlands, the potential presence of threatened/endangered species or their critical habitat, and the potential presence of significant cultural/historic resources.

4.1 WATERS/WETLANDS

The proposed Weller Farm Expansion project will result in unavoidable impacts to on-site wetlands and streams to allow for the development of the property and installation of necessary infrastructure. As shown on Figure 4, the expansion will result in impacts to 915 feet (0.126 acre) of intermittent stream, 510 feet (0.024 acre) of ephemeral stream, and 0.94 acre of wetland.

Wetlands: Construction of the proposed development expansion project will result in impacts to all 0.94 acres of jurisdictional wetlands on site (Figure 4). Due to their central location, these features cannot be avoided. However, due to their relative low quality they do not represent an irretrievable loss of wetland functions/values.

Streams: A total of 915 feet (0.126 acre) of intermittent stream and 510 feet (0.024 acre) of ephemeral stream will be impacted through filling/grading, culverting, or rerouting. The upper portion on Intermittent Stream 1 is located within the footprint of the proposed building/parking and will be filled, while the three impact locations between the two previously permitted buildings will be impacted by culverting to accommodate required grading slopes. Ephemeral Streams 1 and 3 will be impacted by filling to provide for detention basin grading and stable slope grades, respectively. The following table summarizes the proposed jurisdictional stream impacts. Impacts to jurisdictional streams are depicted on Figure 4.

Jurisdictional Stream	Total Length (ft)	Total Area (ac)	Impact Length (ft)	Impact Area (ac)
Intermittent Stream 1	2,080	0.29	915	0.126
Intermittent Stream 3	230	0.03	0	0.000
Intermittent Stream 4	70	0.003	0	0.000
Intermittent Stream Total	**2,380**	**0.32**	**915**	**0.126**
Ephemeral Stream 1	480	0.02	480	0.022
Ephemeral Stream 3	280	0.006	0	0.000
Ephemeral Stream 4	230	0.01	30	0.002
Ephemeral Stream 5	20	0.001	0	0.000
Ephemeral Stream 7	420	0.02	0	0.000
Ephemeral Stream Total	**1,430**	**0.06**	**510**	**0.024**

4.2 PROTECTED SPECIES

The proposed project is not likely to affect species listed by the U.S. Fish and Wildlife Service (USFWS) as potentially occurring in Bullitt County, Kentucky. The status of potential species is summarized below.

Species	Common Name	Status	Habitat Present
Mammals			
Myotis grisescens	Gray Bat	E	No
Myotis sodalis	Indiana Bat	E	Yes*
Mussels			
Pleurobema clava	Clubshell	E	No
Cyprogenia stegaria	Fanshell	E	No
Potamilus capax	Fat Pocketbook	E	No
Plethobasus cooperianus	Orangefoot Pimpleback	E	No
Obovaria retusa	Ring Pink	E	No
Lampsilis abrupta	Pink Mucket	E	No
Pleurobema plenum	Rough Pigtoe	E	No
Plethobasus cyphyus	Sheepnose	C	No
Epioblasma torulosa rangiana	Northern Riffleshell	E	No

E = Federally Endangered Species; T = Federally Threatened Species; C =Federal Candidate Species

* = Habitat was originally present but has since been removed.

At the time of the delineation, the wooded areas of the site contained scattered trees that exhibited potential summer roosting/maternity habitat for the Indiana bat. However, all potential habitat trees located within the proposed development area were marked by Redwing wildlife biologists with appropriate Indiana bat experience and collection permits. Marked trees were cut in the spring of 2008, prior to March 31. Thus, no Indiana bat summer habitat is present on site within proposed impact areas. Also, as the site exhibits no caves, rock houses or mine portals, no gray bat or Indiana bat winter habitat is present.

Thus, the proposed development project will not have an adverse impact on the Indiana bat or any other federally-listed threatened or endangered species.

4.3 ARCHAEOLOGICAL RESOURCES

The site contains one house and four barns and consists primarily of pasture/open fields with forest habitat in the south. A Phase 1 cultural resources survey of the entire 160-acre site was conducted by Cultural Resource Analysts, Inc. (CRA). The results of the survey are that no significant cultural resources are present on the site. A letter was received from the State Historic Preservation Office (SHPO) dated August 5, 2008, stating that SHPO concurs with CRA's conclusion that no feature on the project site is eligible for listing in the National Register of Historic Places and that no additional work is recommended on the project site. A copy of the SHPO clearance letter is provided as Appendix D.

5.0 CONCEPTUAL MITIGATION PLAN

A Conceptual Mitigation Plan has been developed to provide compensation for unavoidable impacts to approximately 1.09 acres of jurisdictional waters/wetlands associated with the Weller Farm Expansion including 915 feet (0.126 acre) of intermittent stream, 510 feet (0.024 acre) of ephemeral stream and 0.94 acre of wetland. The proposed Conceptual Mitigation Plan follows the current USACE Louisville District Mitigation Guidelines (issued April 10, 2008), and the Federal *Compensatory Mitigation for Losses of Aquatic Resource, Final Rule* (April 10, 2008). This plan includes a discussion of impact minimization/avoidance and credit determination.

5.1 MINIMIZATION / AVOIDANCE

Impacts to jurisdictional waters/wetlands on site has been minimized and avoided to as great an extent possible based on size and quality. Overall, the proposed Weller Farm Expansion project will result in impacts to 44% of remaining on-site intermittent streams and 52% of on-site ephemeral streams. While all of the on-site wetlands will be impacted by the project, the low quality and disturbed status of these features minimizes the loss of wetland functions and values in the larger watershed and region.

5.2 CREDIT DETERMINATION

Mitigation credit required to compensate for the unavoidable loss of streams and wetlands on this project has been calculated based on size and quality as summarized below:

Feature	Type of Impacts	Quality	Mitigation Ratio	Mitigation Required
Intermittent Stream	915 feet	Poor	1.0	915 feet
Ephemeral Stream	510 feet	Poor	—	Stormwater system
Emergent – Scrub/Shrub Wetland	0.94 acre	Poor	2.0	1.9 acres

SRDC proposes to provide the necessary wetland mitigation through the purchase of 1.9 acres of credits from an approved wetland mitigation bank. Compensatory mitigation for intermittent stream impacts includes payment of $109,800 to the Kentucky Division of Fish and Wildlife Resources (KDFWR) In-Lieu Stream Fund. The calculated stream in-lieu fee payment includes a 20% temporal loss increase. Compensation for impacts to 510 feet of ephemeral stream will be provided through construction of a stormwater management system for the development.

6.0 CONCLUSION

This application for a Section 404 Individual Permit and Section 401 Water Quality Certification has been prepared on behalf of SRDC, for the proposed Weller Farm Expansion in Bullitt County, Kentucky. The purpose of the project is to provide additional warehouse and distribution facilities as an expansion of the previous Weller Farm development for companies utilizing UPS facilities in Jefferson County, Kentucky. Currently, the demand for this type of facility has absorbed available properties. Based on an analysis of potential alternative sites and alternative site designs, the proposed project represents the least environmentally damaging practicable alternative for meeting the established project objectives.

The proposed Weller Farm Expansion project will result in unavoidable impacts to 1.09 acres of jurisdictional waters of the U.S., including: 0.94 acre of wetland; 915 linear feet (0.126 acre) of intermittent stream; and 510 linear feet (0.024 acre) of ephemeral stream.

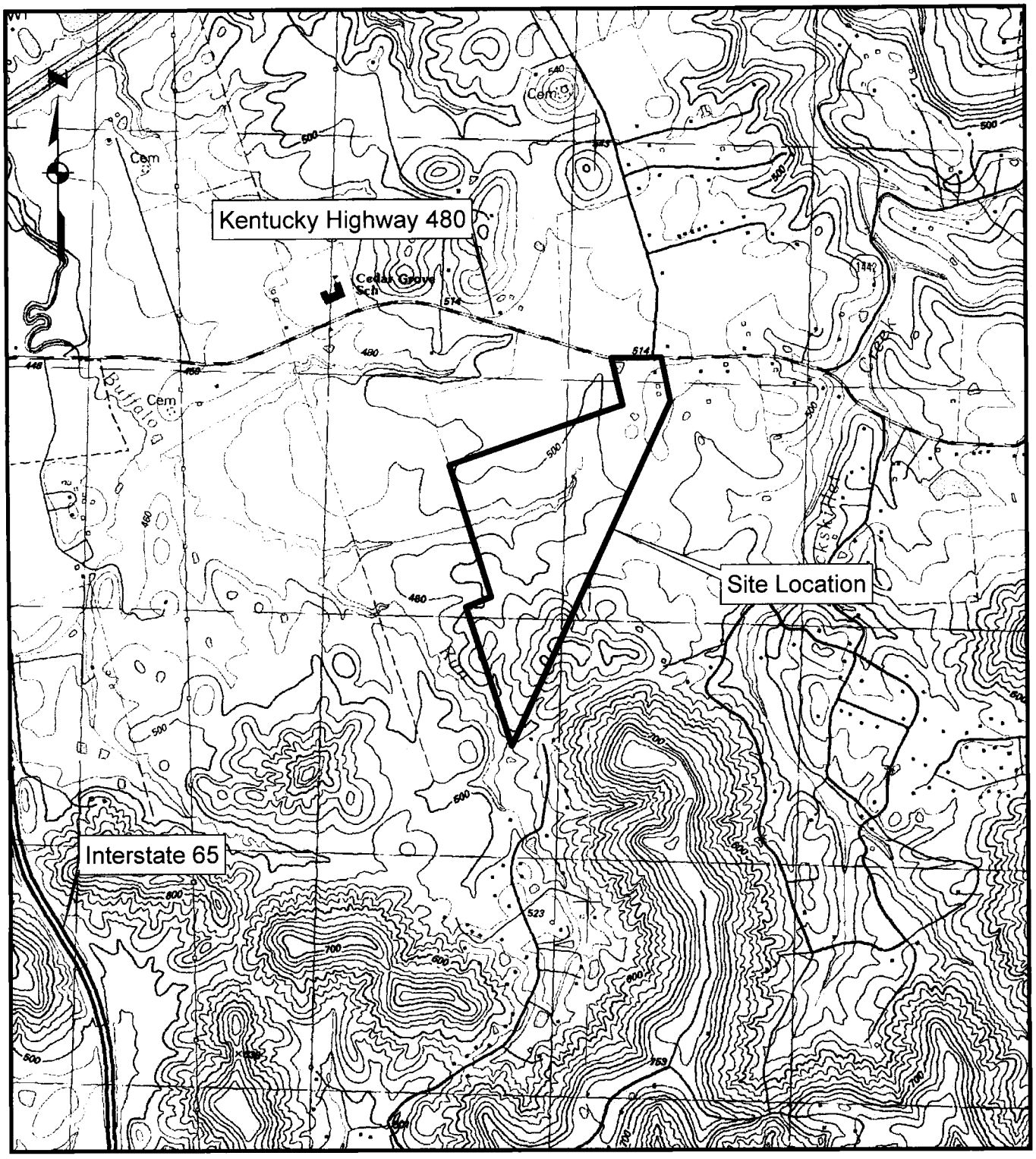
Compensation for impacts to jurisdictional waters associated with the project include: payment of $109,800 to the KDFWR In-Lieu Stream Fund, construction of a storm water management system, and purchase of 1.9 acres of credit from and approved wetland mitigation bank.

Potential habitat for the federally endangered Indiana bat (*Myotis sodalis*) was identified on the project site. However, all potential habitat trees located within the proposed development area were marked by Redwing wildlife biologists and cut down in the spring of 2008, prior to March 31st. Thus, the proposed development expansion will not have any adverse impact on the Indiana bat or any other federally-listed threatened/endangered species.

A Phase 1 cultural resources survey of the site was conducted by Cultural Resource Analysts, Inc. (CRA). The results of the survey are that no significant cultural resources are present on the site. In a letter dated August 5, 2008, the State Historic Preservation Office (SHPO) stated that they concur with CRA's conclusion that nothing on the project site is eligible for listing in the National Register of Historic Places and that no additional work needs to be conducted on the project site.

FIGURES

Source: USGS 7.5-minute topographic quadrangle map - Shepherdsville, KY



WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

FILE: Projects/08-033/Figures/NWP39/SiteLocation

REDWING PROJECT 08-033

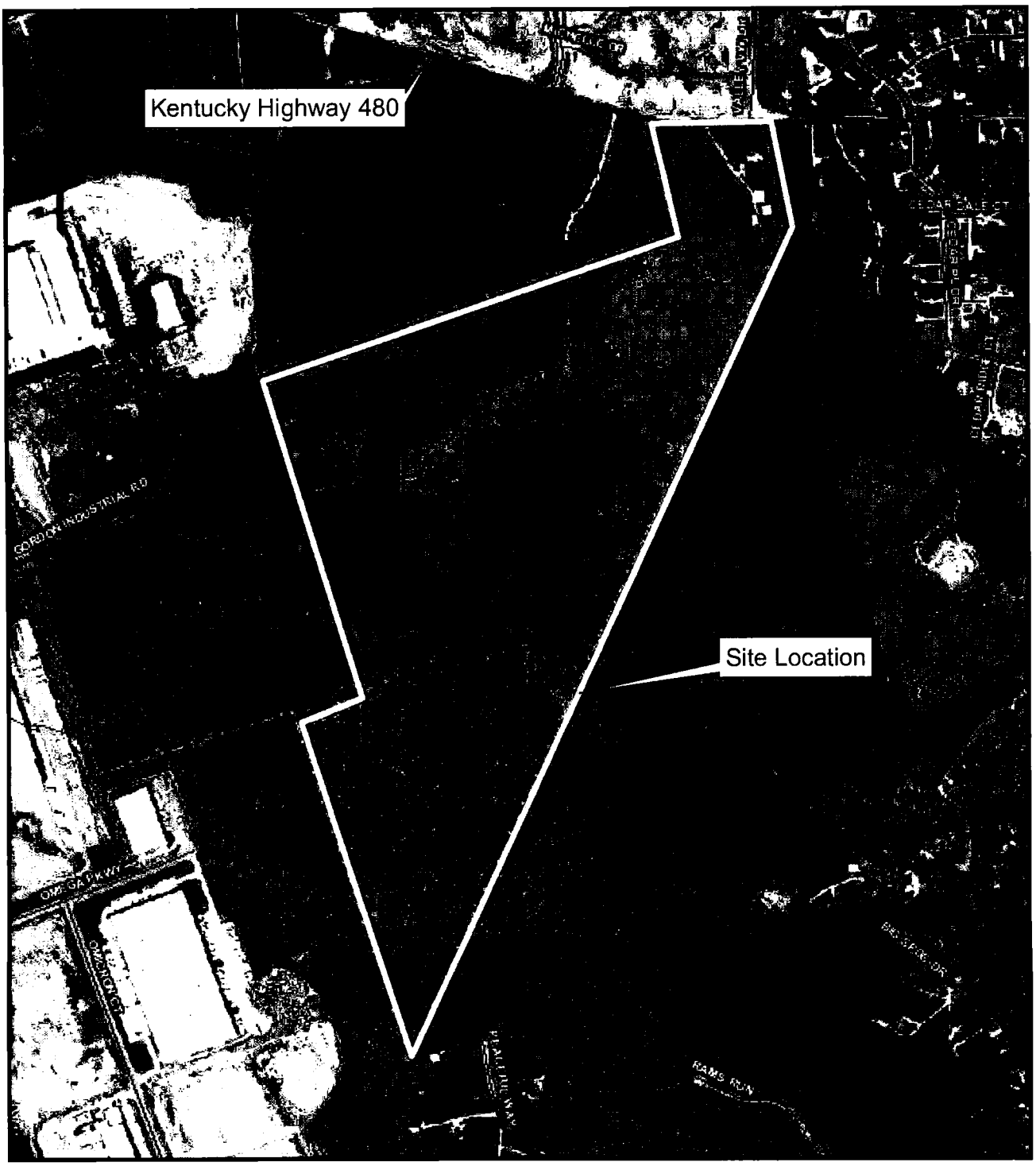
PRINT DATE 11-3-08 | DRAWN BY LAD-M

REDWING
ECOLOGICAL SERVICES, INC.

SITE LOCATION MAP

FIGURE 1

Source: FSA NAIP Ortho Photo Imagery for Kentucky (2004)



WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

FILE: Projects/08-033/Figures/NWP39/Aerial

REDWING PROJECT 08-033

PRINT DATE 6-2-08 | DRAWN BY LAD-M

REDWING
ECOLOGICAL SERVICES, INC.

AERIAL PHOTOGRAPH

FIGURE 2

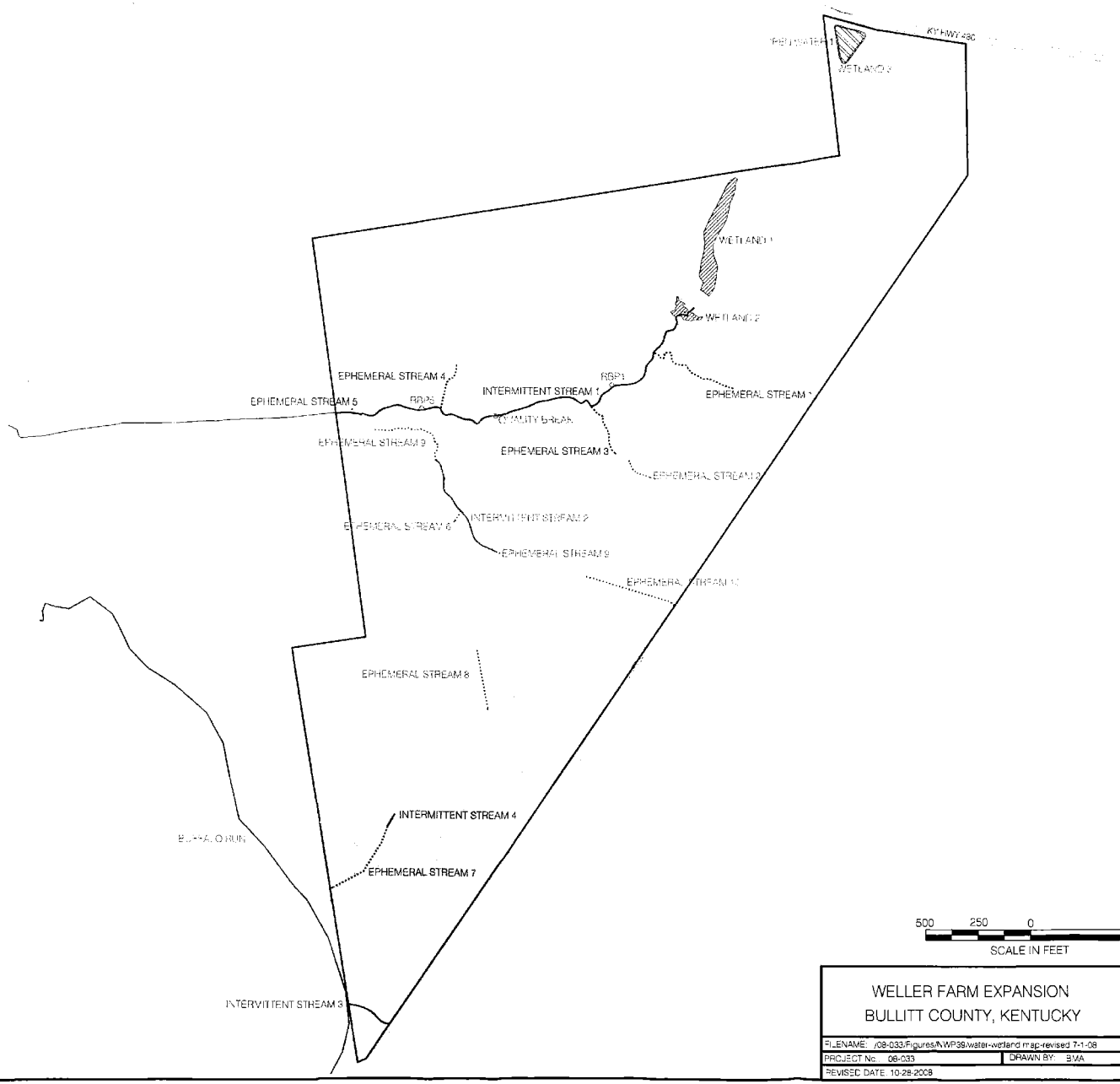


Table 1: Delineation Water/Wetland Table
Weller Farm Development
Bullitt County, Kentucky

Feature	Stream Length (ft)	Area (acres)	Status
Intermittent Stream 1	2,080	0.29	Jurisdictional
Intermittent Stream 2	550	0.03	Isolated
Intermittent Stream 3	230	0.03	Jurisdictional
Intermittent Stream 4	70	0.003	Jurisdictional
Intermittent Stream Total[1]	**2,380**	**0.32**	
Ephemeral Stream 1	480	0.02	Jurisdictional
Ephemeral Stream 2	145	0.002	Isolated
Ephemeral Stream 3	280	0.006	Jurisdictional
Ephemeral Stream 4	230	0.01	Jurisdictional
Ephemeral Stream 5	20	0.001	Jurisdictional
Ephemeral Stream 6	65	0.001	Isolated
Ephemeral Stream 7	420	0.02	Jurisdictional
Ephemeral Stream 8	290	0.01	Isolated
Ephemeral Stream 9	450	0.04	Isolated
Ephemeral Stream 10	445	0.03	Isolated
Ephemeral Stream Total[1]	**1,430**	**0.06**	
Wetland 1	---	0.79	Jurisdictional
Wetland 2	---	0.15	Jurisdictional
Wetland 3	---	0.07	Isolated
Wetland Total[1]		**0.94**	
Open Water 1	---	0.30	Isolated
Open Water Total[1]	**---**	**0.00**	
Total Jurisdictional Waters[1]	**3,810**	**1.32**	

Notes:
1 = Totals are only for jurisdictional waters. Isolated waters were not included

LEGEND
- SITE BOUNDARY
- INTERMITTENT STREAM LOCATION
- ISOLATED INTERMITTENT STREAM LOCATION
- EPHEMERAL STREAM LOCATION
- ISOLATED EPHEMERAL STREAM LOCATION
- WETLAND LOCATION
- ISOLATED WETLAND LOCATION
- ISOLATED OPEN WATER LOCATION
- RBP1 RAPID BIOASSESSMENT PROTOCOL LOCATION

500 250 0 500
SCALE IN FEET

NOTE: JURISDICTIONAL WATER/WETLAND BOUNDARIES WERE DELINEATED AND SURVEYED USING GLOBAL POSITIONING SYSTEM EQUIPMENT BY REDWING WETLAND SCIENTISTS ON JULY 25, 26 AND 27, 2007 AND APRIL 21, 2008. THESE BOUNDARIES WERE FIELD VERIFIED BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) ON JUNE 30, 2008. A NATIONWIDE PERMIT 39 (USACE ID NO. LRL-2008-683) WAS AUTHORIZED BY THE USACE ON AUGUST 25, 2008 FOR IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF THE WESTERN TWO BUILDINGS. AS PART OF THAT PERMIT, AN APPROVED JURISDICTIONAL DETERMINATION WAS ISSUED FOR ALL OF THE FEATURES LISTED AS ISOLATED ON THIS FIGURE. A PRELIMINARY JURISDICTIONAL DETERMINATION WAS ALSO SIGNED BY BOTH THE DEVELOPER AND THE USACE FOR ALL OF THE FEATURES IDENTIFIED AS JURISDICTIONAL ON THIS FIGURE.

SOURCE: BASE MAP PROVIDED BY GRESHAM SMITH AND PARTNERS

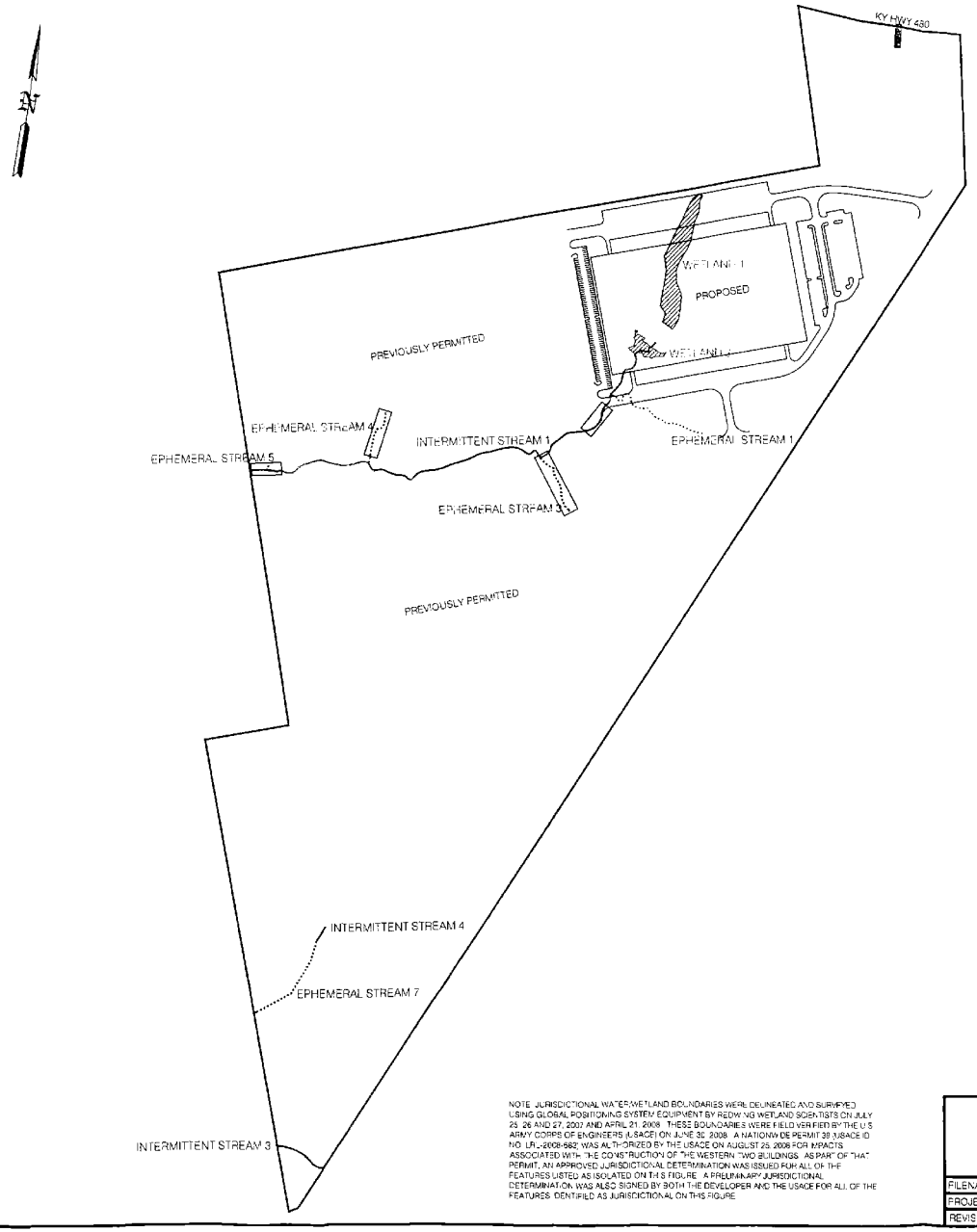
WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

FILENAME: /08-033/Figures/MWP99/water-wetland map-revised 7-1-08
PROJECT No. 08-033 | DRAWN BY: BMA
REVISED DATE: 10-28-2008

REDWING ECOLOGICAL SERVICES, INC.

REVISED WATER/WETLAND LOCATION MAP

FIGURE 3



Jurisdictional Feature	Proposed Impacts (feet)	Proposed Impacts (acre)
Intermittent Stream 1	915	0.126
Intermittent Stream 3	0	0.000
Intermittent Stream 4	0	0.000
Intermittent Stream Total	**915**	**0.126**
Ephemeral Stream 1	480	0.022
Ephemeral Stream 3	0	0.000
Ephemeral Stream 4	30	0.002
Ephemeral Stream 5	0	0.000
Ephemeral Stream 7	0	0.000
Ephemeral Stream Total	**510**	**0.024**
Wetland 1	----	0.790
Wetland 2	----	0.150
Wetland Total	**—**	**0.940**
Total Jurisdictional Waters	**1,425**	**1.090**

LEGEND

- SITE BOUNDARY
- INTERMITTENT STREAM LOCATION
- EPHEMERAL STREAM LOCATION
- PROPOSED INTERMITTENT STREAM IMPACTS
- PROPOSED EPHEMERAL STREAM IMPACTS
- PROPOSED WETLAND IMPACTS
- PREVIOUSLY PERMITTED INTERMITTENT STREAM IMPACTS
- PREVIOUSLY PERMITTED EPHEMERAL STREAM IMPACTS

500 250 0 500

SCALE IN FEET

SOURCE: BASE MAP PROVIDED BY GRESHAM SMITH AND PARTNERS

NOTE: JURISDICTIONAL WATER/WETLAND BOUNDARIES WERE DELINEATED AND SURVEYED USING GLOBAL POSITIONING SYSTEM EQUIPMENT BY REDWING WETLAND SCIENTISTS ON JULY 25, 26 AND 27, 2007 AND APRIL 21, 2008. THESE BOUNDARIES WERE FIELD VERIFIED BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) ON JUNE 30, 2008. A NATIONWIDE PERMIT 39 (USACE ID NO. LRL-2008-582) WAS AUTHORIZED BY THE USACE ON AUGUST 25, 2008 FOR IMPACTS ASSOCIATED WITH THE CONSTRUCTION OF THE WESTERN TWO BUILDINGS. AS PART OF THAT PERMIT, AN APPROVED JURISDICTIONAL DETERMINATION WAS ISSUED FOR ALL OF THE FEATURES LISTED AS ISOLATED ON THIS FIGURE. A PRELIMINARY JURISDICTIONAL DETERMINATION WAS ALSO SIGNED BY BOTH THE DEVELOPER AND THE USACE FOR ALL OF THE FEATURES IDENTIFIED AS JURISDICTIONAL ON THIS FIGURE.

WELLER FARM EXPANSION
BULLITT COUNTY, KENTUCKY

FILENAME: /Figures/ PAP impact map
PROJECT No.: 08-033 | DRAWN BY: BMA
REVISED DATE: 10-28-2008

REDWING ECOLOGICAL SERVICES, INC.

PROPOSED DEVELOPMENT MAP

FIGURE 4

PHOTOGRAPHS

Photograph 1: Mowed open field/pasture habitat in the northern portion of the site, facing east toward Wetland 1. This habitat was dominated by common upland grasses. Weller Farm Expansion. July 6, 2007.

Photograph 2: Wetland 1, facing north from the southern portion of the wetland has developed in a drained farm pond. Weller Farm Expansion. April 21, 2008.

Photograph 3: Wetland 2, located on downstream side of former pond dam. Facing west from eastern end. Weller Farm Expansion. July 6, 2007.

Photograph 4: Upstream portion of Intermittent Stream 1, located in the north-central portion of the site near Ephemeral Stream 1. Weller Farm Expansion. July 6, 2007.

APPENDIX A

PERMIT APPLICATION FORMS

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT (33 CFR 325)	OMB APPROVAL NO. 0710-003 Expires October 1996

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting navigable waters of the United States, the discharge of dredged or fill materials into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (*an agent is not required*)
Mr. Jim Rice Salt River Development Company, LLC	Redwing Ecological Services, Inc.
6. APPLICANT'S ADDRESS	9. AGENT'S ADDRESS
1213 Outer Loop Louisville, Kentucky 40219	1139 South Fourth Street Louisville, KY 40203
7. APPLICANT'S PHONE NOS. W/AREA CODE	10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence b. Business (502) 364-9100	a. Residence b. Business (502) 625-3009

11. STATEMENT OF AUTHORIZATION

I hereby authorize, Redwing Ecological Services, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE	DATE
	11/5/08

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

Weller Farm Expansion

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*

Unnamed tributaries to Buffalo Run

14. PROJECT STREET ADDRESS *(if applicable)*

Property is located on the south side of Kentucky Highway 480, approximately 1.8 miles east of the intersection of Interstate 65 and Kentucky Highway 480 in Bullitt County, Kentucky

15. LOCATION OF PROJECT

Bullitt	Kentucky
COUNTY	STATE

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN *(see instructions)*

The site is bound to the north by Kentucky Highway 480 and to the west by the Cedar Grove Industrial Park.

17. DIRECTIONS TO THE SITE

I-65 South to Kentucky Highway 480 (exit 116). Go east on Park 480 (left at bottom of exit ramp). Travel approximately 1.8 miles east on Kentucky Highway 480. Site will be on right (south side of highway).

18. Nature of Activity *(Description of project. Include all features)*
The proposed expansion of the Weller Farm development involves the construction of a third light industrial/warehouse facility with associated roads, parking and infrastructure, as wells modifications to the building sizes on the permitted buildings and the location of their associated roads, parking and infrastructure.

19. Project Purpose *(Describe the reason or purpose of the project, see instructions)*

The purpose of this project is to expand the Weller Farm development to provide needed light industrial/warehouse development along the I-65 corridor in Bullitt County, Kentucky.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge
The proposed project will include impacts to jurisdictional streams and wetlands. These areas will be permanantly impacted through construction of buildings, roads, parking, utilities, detention basins and site development activities.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Clean fill material obtained on site will be used to fill jurisdictional waters. Approximately 18,000 cubic yards of fill will be required.

22. Surface Area in Acres of Wetlands or Other Waters Filled *(see instructions)*

A NWP 39 was authorized by the USACE on August 25, 2008 (USACE ID No. LRL-2008-683) for the construction of two light industrial/warehouse facilities and the associated roads, parking, and infrastructure on the Weller Farm Development. The Salt River Development Company now has the need to construct an additional light industrial/wharehouse facility to the east of the permitted northwestern building. There has also been some changes to the building size requirements for the two permitted buildings, which has altered some of the permitted road alignments. Based on the need for and additional building and the change in building size requirements, total impacts associated with this proposed Weller Farm Expansion include 915 feet (0.126 acre) of intermittent stream, 510 feet (0.024 acre) of ephemeral stream, and 0.94 acre of wetland.

23. Is Any Portion of the Work Already Complete? Yes__X__ No _____ IF YES, DESCRIBE THE COMPLETED WORK

As described under Item 22, a NWP 39 was authorized on August 25, 2008 by the USACE for the construction of two light industrial/warehouse facilities and associated roads, parking, and infrastructure. The construction of these two buildings and associated parking, roads and infrastructure began in September of 2008.

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).
Please see Appendix B of the Individual Permit package.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
KDOW	Water Quality Certification		Applied concurrently		

*Would include but is not restricted to zoning, building and flood plain permits.

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this Application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

authorized agent of the applicant.

James H. Rice — 11/5/08

SIGNATURE OF APPLICANT — DATE

SIGNATURE OF AGENT — DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.